

Shadow Miner

Introduction

1. Game Summary and Theme Interpretation

The dwarven mines are filled with wretched creatures which hide in the shadows and will kill all trespassers, especially those who want their gold. But they are not prepared for the Shadow Miner! An Alchemist driven by his greed for gold and his lifelong quest to find the philosopher's stone. The Alchemist will brave the creatures of the dark to fuel his greed.

Our main character is an alchemist with magical powers who is looking for materials in a dark cave full of monsters to make some gold. Since he is moving through the dark, he will have to be careful about what he picks up, as the items he picks up can be cursed, and he has to be careful of his surroundings, as while he tries to pick up items, he can be ambushed by the creatures in the dark (like crows, shadow creatures, etc). The idea is to be able to find enough gold within the time limit, which would help our alchemist in the acquisition of the sought-after philosopher's stone.

2. Inspiration

- Core Idea: Classic Miniclip Gold Miner Game

3. Mechanics outline

1. Health -> If the alchemist has health lower than a certain amount, he dies and cannot continue. The game resets.
2. Time Limit -> To limit the scope of each stage.
3. Cursed and buffed items -> boost money gathering or make it more difficult.
4. Money/gold -> Reach a certain amount of gold to win
5. (Optional) Gather philosopher's stone shards

4. Player Experience

The player will be on one side of the screen and can move around when he has to attack monsters. The player uses his staff to capture resources to acquire gold/money or other items and keep moving forward in the game.

5. Development Software

- Game Engine: Godot 4.2
- Art: LibreSprite Autodesk Sketchbook
- Audio Software: Audacity

6. Genre

- Single Player
- Survival

7. Target Audience

The aim is to make a simple and intuitive game which both casual and veteran gamers can enjoy.

8. Team

We are a team of two people trying to make a game for the first time with no past game development experience.

Concept

1. Game Play Overview

- There will be items which would be at the top of the screen, which can be attracted by the player to meet the objectives at each stage. There will be different types of items:
 - Money Items: gold and rock
 - Buff / Multiplier Items: Increases the value of any Money items which the player gains after getting this item for 5-10 seconds.
 - Debuff Items: Lower attraction force, making gold gathering slower for 5s
 - Time Bonus: +5/10 s on the timer.
 - Progression Item: Philosopher's Shard
- Player Controls:
 - The player can move around using the Arrow keys.
 - The player can jump using the spacebar.
 - The player can press and hold the left mouse button to use the attraction capabilities of the staff, and releasing the button will stop the effect.
 - The player can use the [right mouse button?] to attack incoming enemies.
- There will be enemies coming from either side of the screen, and the player will be standing in the centre. These are the enemies one can expect to encounter in the game:
 - Crows
 - Shadow Creatures

2. Theme Interpretation

The greed of the Alchemist surpasses fear itself! {Alchemists will be Alchemists after all}

With shadow and alchemy as the theme, we imagine that the alchemist (the player) set out on a quest to find the philosopher's stone. The player needs to collect enough money to win (bidding money used where the philosopher's stone is being auctioned, or find enough shards of the philosopher's stone to make our own). On their quest for glory, enemies appear to hinder the foul alchemist, as they remain in the same place as the gold: the dwarven mines.

3. Game Mechanics

Sno.	Mechanic	Description	Status	Notes
1	Health and Resource System (and HUD)	Indicate the amount of health the player has left the Amount of Gold the player has acquired, and any associated item effects which need to be applied to it.	Completed ▾	<ul style="list-style-type: none"> - Need to balance the resource acquisition with the difficulty of the game, as at the beginning, the game is too difficult if you get too many enemies showing up with the 60s time limit, but after that, it keeps getting easier as the game goes along. - Also, the item spawn location right now could maybe be changed
2	Player Movement	Basic Movement of the player, as well as the associated animations and scripts	Completed ▾	Try to use Animation Player in all future projects instead of Animated Sprite, especially for things that have a collision shape.
3	Player Combat	Projectile shooting from the player, and animation	Prototype Level ▾	<p>The animation for this now kind of works.</p> <p>Potential Updates:</p> <ul style="list-style-type: none"> - The sprite for the attack could potentially be changed - Maybe a different type of attack can be upgraded by using a shop item, like some way to throw potions, which act like Molotov cocktails on the enemies
4	Staff Attraction and Aiming	The player can aim the staff in any direction and attract items towards themselves.	Prototype Level ▾	<p>The mechanic works pretty well, but it would be nice to visually see where the staff is aiming, which could have its associated sprite.</p> <p>Potential Updates:</p> <ul style="list-style-type: none"> - Can potentially add a way to kill enemies by throwing items at them
5	Items	Implement the 5 Types of Items	Prototype Level ▾	Currently, we just have a basic item type, but they don't have any special

		(Buffs, Debuffs, Time Bonus, Progression Items, Money Items). Associated Scripts / Animations.		<p>effects or types</p> <p>Potential Updates:</p> <ul style="list-style-type: none"> - Item sprites need to be changed, especially the coin - Add some type of effect to show the impact of acquiring the different types of items
6	Menu / Options / Other UI	<ol style="list-style-type: none"> 1. Title Screen 2. Options Window, 3. You died! Replay? Screen 4. Congratulations, You Won! Replay? Screen 5. Ran out of Time! Replay? Screen 6. Not Enough Gold to Continue! Replay? Screen 7. You found the Philosopher's Stone! Replay? Screen 	Prototype Level ▾	<p>Need to make art for the title screen and level backgrounds. And all of the different replay screens make all of the UI look nicer.</p> <p>Potential Update:</p> <ul style="list-style-type: none"> - Add pause menu - Change the name of the options menu to settings instead - Add the Credits button in the options/settings menu
7	Item Shop	<p>Have a dwarf who shows up if you have gold = equal to your current target, which asks if you want to buy something. Associated Art/ Scripts/ Animation,s etc.</p>	Not started ▾	<p>Update:</p> <ul style="list-style-type: none"> - Add an Item shop which shows up every time a stage is cleared, or make the philosopher's shard appear less frequently and then show the shop upon acquiring it. - Some artwork for the item shop also needs to be made (like a dwarf who asks for some money to buy stuff) - The game progression should be such that equipping an item becomes both more necessary as you progress, and also a

8	Enemy spawning and enemies	Spawning enemies on both sides of the screen to attack the player	Prototype Level ▾	Updates: <ul style="list-style-type: none"> - More types of enemies are required - Some effect to show that the enemy attack did something - Add a boss fight at the end of each Stage - Different Enemies for different stages. If it's too annoying to make too many enemies, I can always just use the same enemies with slight changes to them, like colour and other properties, before they are spawned.
9	Stages and Game Progression	Restructure the game to have different levels as the player continues to reach the target, with a boss fight upon reaching the target 2-3 times for a stage.	Prototype Level ▾	Update: <ul style="list-style-type: none"> - Create different locations for each stage by using different backgrounds - Maybe add some platforming elements to the game as well (?)

Art

Originally, the intention was to make all the art ourselves; however, due to time constraints, we have decided on only make art for some of the portions ourselves and use free assets which we can find online on websites such as itch.io instead. The art style of the main game will be using pixel art, as most assets we found online used that style. We will draw the art for the Title Screen..

Audio

Music

A continuous adventure-esque 8-bit song (taken from freesound.org, press [here](#) for more info)

Game Experience

The idea is to collect as much gold as you can while fighting enemies and the time limit. The player will be on the floor trying to attract items using his staff, which would also trigger some enemies from above, and there will also be some enemies trying to attack the alchemist at ground level.

Development Timeline

#	Assignment	Type	Status	Finish By	Notes
1	Design Document	Other ▾	In progress ▾	Jul 30, 2024	Continuously improve
2	Create player and enemy designs	Art ▾	Finished ▾	Jul 22, 2024	We mainly ended up using community assets, so we skipped this
3	Main menu theme	Audio ▾	In progress ▾	Jul 25, 2024	Something epic could work
4	UI / Main menu	Coding ▾	In progress ▾	Jul 21, 2024	Button UI, screen transition, title screen
5	Level theme	Audio ▾	Finished ▾	Jul 25, 2024	Something which is fun but not too upbeat and has the 8-bit vibe
6	Simple player movement	Coding ▾	Finished ▾	Jul 20, 2024	Move left and right and jump
7	Simple enemy movement	Coding ▾	Finished ▾	Jul 29, 2024	Movement depends on the enemy
8	Simple game mechanics	Coding ▾	Finished ▾	Jul 22, 2024	Staff Attraction Implementation
9	Complex game mechanics	Coding ▾	Finished ▾	Jul 25, 2024	Staff Mechanic
11	Special effects	Art ▾	Discarded ▾	Jul 30, 2024	Don't know if we'll have time for this
12	Making Art for the Game	Art ▾	Not started ▾	Jul 29, 2024	Different End Screens/ Title Screens /Tutorial
13	Sound effects	Audio ▾	Discarded ▾	Jul 30, 2024	Don't know if we'll have time for this
14	Export the Game as a web file and make an itch.io page for it	Other ▾	Not started ▾	30 Jul 2024	Submission

#	Assignment	Type	Status	Finish By	Notes
15	Add Pause Menu	Coding ▾	Finished ▾	Aug 15, 2024	
16	Update Options Menu	Coding ▾	Not started ▾	Aug 16, 2024	
17	Move the Canvas Layer and Spawn Logic from the world node to the game manager node	Coding ▾	Finished ▾	Aug 17, 2024	I just needed to switch the redirect from the main menu to the game manager scene instead of the world scene. This could mean that I might need to change this in the future. I'm not sure how this will work when exported as well.
18	Change Sprites for some Items(Coins / Philosopher's Stone)	Art ▾	Not started ▾	Aug 17, 2024	
19	Add more types of enemies	Coding ▾	Not started ▾	Aug 18, 2024	
20	Add special effects that show up when picking up objects and killing enemies.	Coding ▾	Not started ▾	Aug 18, 2024	
21	Add Items Shop and make some art for it.	Coding ▾	Not started ▾	Aug 19, 2024	
22	Add a boss Fight	Coding ▾	Not started ▾	Aug 20, 2024	
23	Fine-tune game progression and difficulty curve	Other ▾	Not started ▾	Aug 21, 2024	

Assets Used

1. Music:

- Dark Room by Freaklord -- <https://freesound.org/s/730344/> -- License: Attribution 4.0
- AMBMisc_Early Morning.Summer.Near The School.Swifts.Crows.Passing Cars 1_EM by newlocknew -- <https://freesound.org/s/747635/> -- License: Attribution 4.0

2. Assets:

- Crow Sprite and Animation – <https://smithygames.itch.io/crow-sprite>
- Player Sprite and Animation - <https://luizmelo.itch.io/wizard-pack>
- Parallax Background - <https://slashdashgamesstudio.itch.io/cave-background-assets>
- Cave Floor - <https://szadiart.itch.io/rpg-worlds-ca>
- Gold and Rock Sprite - <https://magrozadev.itch.io/rpg-icons>
- Health UI - <https://etahoshi.itch.io/minimal-fantasy-gui-by-eta>
- Shadow Enemy Sprite and Animation –
<https://escape-pixel.itch.io/the-shadowed-wetlands-boss>
- Bullet Asset - <https://foozlecc.itch.io/pixel-magic-sprite-effects>
- Attraction Zone Sprite - Made in Autodesk Sketchbook by us